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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,744	10/22/2001	Dirk Quintens	27500-10	8435

7590 11/08/2004

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EXAMINER
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TSOY, ELENA

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/085,744

Applicant(s)

QUINTENS ET AL.

Examiner

Elena Tsoy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9/30/04.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

***Request for Reconsideration***

1. Request for Reconsideration filed on September 30, 2004 has been considered. New Action is as follows.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-3** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US 6,485,812) in view of JP63101463.

Sekiguchi discloses a method for the preparation of an ink jet recording sheet comprising coating and drying an ink-receiving layer having a binder, tetraalkoxytitanium and colloidal silica (claimed layer b), ~~on~~ an ink-receiving layer made of alumina hydrate (claimed layer a) (See column 15, lines 28-33). The ink-receiving layer (b) may be based on water or employ an *organocolloidal* silica, where water is substituted by an organic solvent such as methanol, ethylene glycol for the purpose of suppressing hydrolysis of the tetraalkoxytitanium (See column 15, lines 33-40). The ink-receiving layer (b) may contain various additives including surfactants (See column 12, lines 39-42). Both layers comprise, in addition to fine inorganic particles of alumina hydrate or colloidal silica (See column 9, lines 28-30), a binder in an amount of 0.1 to 100 parts by weight, more preferably from 2 to 50 parts by weight, per 100 parts by weight of the fine inorganic particles (See column 12, lines 32-34). The binder resin is any known natural and

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synthetic resin binder without any particular restriction (See column 12, lines 13-16), including (water-soluble) hydroxyethyl (ether) cellulose (See column 11, lines 60-65) and PVA, which is a *water-soluble* polymer, which is also soluble in methanol and ethylene glycol (See column 11, lines 60-67; column 12, lines 1-20), or preferably binder resins containing amino groups (See column 12, lines 16-20).

In other words, the an ink jet recording sheet of Sekiguchi comprises a layer pack comprising in order, (a) a layer *containing* aqueous dispersion of alumina hydrate pigment in an amount within claimed range and an *aqueous solution* of PVA (See column 31, lines 46-59), and (b) a layer *containing* a water-soluble polymer PVA and an organocolloidal silica in methanol, ethylene glycol.

Sekiguchi fails to teach that the layers (a) and (b) are coated simultaneously wet-on-wet wherein the static surface tension of a top layer (b) is lower than the static surface tension of a layer (a) (Claim 1).

JP'463 teaches that when upper coat paint, e.g. clear paint is applied on a base coat paint by wet-on-wet process, wherein the surface tension of the base paint is higher than that of the upper coat paint, the upper coat paint expands to make thin film over the base coat film surface, and shows good levelling property (See Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied upper layer (b) on a base layer (a) in Sekiguchi by wet-on-wet process, wherein the surface tension of the base layer (a) is higher than that of the upper layer (b), with the expectation of providing the desired good levelling property and good expansion of the upper layer (b) to make thin film over the base layer (a) surface, as taught by JP'463.

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4. **Claims 4-6, 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US 6,485,812) in view of JP63101463, further in view of Cousin et al (US 4,554,181) for the reasons of record as set forth in Paragraph No. 5 of the Office Action mailed on July 7, 2004.

5. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US 6,485,812) in view of JP63101463, further in view of Cousin et al (US 4,554,181), and further in view of Rabasco (US 6,455,134) for the reasons of record as set forth in Paragraph No. 6 of the Office Action mailed on July 7, 2004.

6. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US 6,485,812) in view of JP63101463 in view of Cousin et al (US 4,554,181), and further in view of Malhotra et al (US 5,693,410) for the reasons of record as set forth in Paragraph No. 7 of the Office Action mailed on July 7, 2004.

7. **Claims 11, 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (US 6,485,812) in view of JP63101463, further in view of Van den Zegel (US 5,693,370) for the reasons of record as set forth in Paragraph No. 8 of the Office Action mailed on July 7, 2004.

#### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-9, 11, 12 have been considered but are moot in view of the new ground(s) of rejection.

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***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (571) 272-1429. The examiner can normally be reached on Mo-Thur. 9:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ELENA TSOY  
PRIMARY EXAMINER  
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Elena Tsoy  
Primary Examiner  
Art Unit 1762

November 3, 2004